Opioid Use in Neonates

Content Outline

1. Overview of Pain Control & Neurological Effects of Anesthetics and Sedatives in Neonates
   1.1 Indications for sucrose use and potential neurologic impact
   1.2 Data and potential impact of anesthetic use for major procedural pain
   1.3 Current evidence and potential impact of drugs used for chronic pain & pain management in ventilated neonates
      1.3.1 Benzodiazepines
      1.3.2 Opioids
      1.3.3 Alpha 2 adrenergic agonists
      1.3.4 Paracetamol
   1.4 Premedication for intubation

2. Review of the Clinical Pharmacology of Fentanyl in Preterm Infants
   2.1 Effects and metabolism of fentanyl in neonates
   2.2 Comparison of pharmacokinetics between continuous infusion and bolus administration
   2.3 Comparison of analgesic effects between continuous infusion and bolus administration
   2.4 Impact of ECMO on plasma levels of fentanyl
   2.5 Adverse effects related to fentanyl use in neonates

Reading Material Resources

Module 1739 Opioid Use in Neonates is based on the following reading material:

Neonatal Pain Control and Neurologic Effects of Anesthetics and Sedatives in Preterm Infants, McPherson C and Grunau RE. Clinics in Perinatology 41, 2014, pp 209-227
